

CLAIMS

We claim:

1. A microbical composition comprising a synergistic mixture, the first component of which is 2-methyl-3-isothiazolone, and the second component of 5 which is one or more commercial microbicides selected from the group consisting of benzoic acid, sorbic acid, 1,2-dibromo-2,4-dicyanobutane, 1,3-dimethylol-5,5-dimethylhydantoin, phenoxyethanol, zinc pyrithione and climbazole; wherein the ratio of the first component to the second component is from 1/0.001 to 1/1000; and wherein the composition is substantially free of halogenated 3-isothiazolone.
- 10 2. The composition of claim 1 wherein the ratio of 2-methyl-3-isothiazolone to benzoic acid is from 1/0.1 to 1/100.
3. The composition of claim 1 wherein the ratio of 2-methyl-3-isothiazolone to sorbic acid is from 1/2 to 1/150.
- 15 4. The composition of claim 1 wherein the ratio of 2-methyl-3-isothiazolone to 1,2-dibromo-2,4-dicyanobutane is from 1/0.4 to 1/100.
5. The composition of claim 1 wherein the ratio of 2-methyl-3-isothiazolone to 1,3-dimethylol-5,5-dimethylhydantoin is from 1/0.05 to 1/100.
6. The composition of claim 1 wherein the ratio of 2-methyl-3-isothiazolone to phenoxyethanol is from 1/1 to 1/1000.
- 20 7. The composition of claim 1 wherein the ratio of 2-methyl-3-isothiazolone to zinc pyrithione is from 1/0.001 to 1/20.
8. The composition of claim 1 wherein the ratio of 2-methyl-3-isothiazolone to climbazole is from 1/0.03 to 1/30.
- 25 9. A microbical composition comprising a synergistic mixture, the first component of which is 2-methyl-3-isothiazolone, and the second component of which is one or more commercial microbicides selected from the group consisting of citric acid and benzyl alcohol; wherein the ratio of the first component to the second component is from 1/8 to 1/24 when the second component is citric acid; wherein the ratio of the first component to the second component is from 1/0.13 to 1/32 or from 1/80 to 1/1600 when the second component is benzyl alcohol; and wherein the composition is substantially free of halogenated 3-isothiazolone.

10. A method of inhibiting the growth of microorganisms in a locus comprising introducing to, at or on, the locus a microorganism inhibiting amount of a synergistic mixture the first component of which is 2-methyl-3-isothiazolone, and the second component of which is one or more commercial microbicides
5 selected from the group consisting of benzoic acid, sorbic acid, 1,2-dibromo-2,4-dicycanobutane, 1,3-dimethylol-5,5-dimethylhydantoin, phenoxyethanol, zinc pyrithione and climbazole; wherein the ratio of the first component to the second component is from 1/0.001 to 1/1000; wherein the composition is substantially free of halogenated 3-isothiazolone; and wherein the amount of synergistic
10 mixture is from 0.1 to 10,000 parts per million active ingredient.